

4.2.A. 0604000401 (Buffalo River).

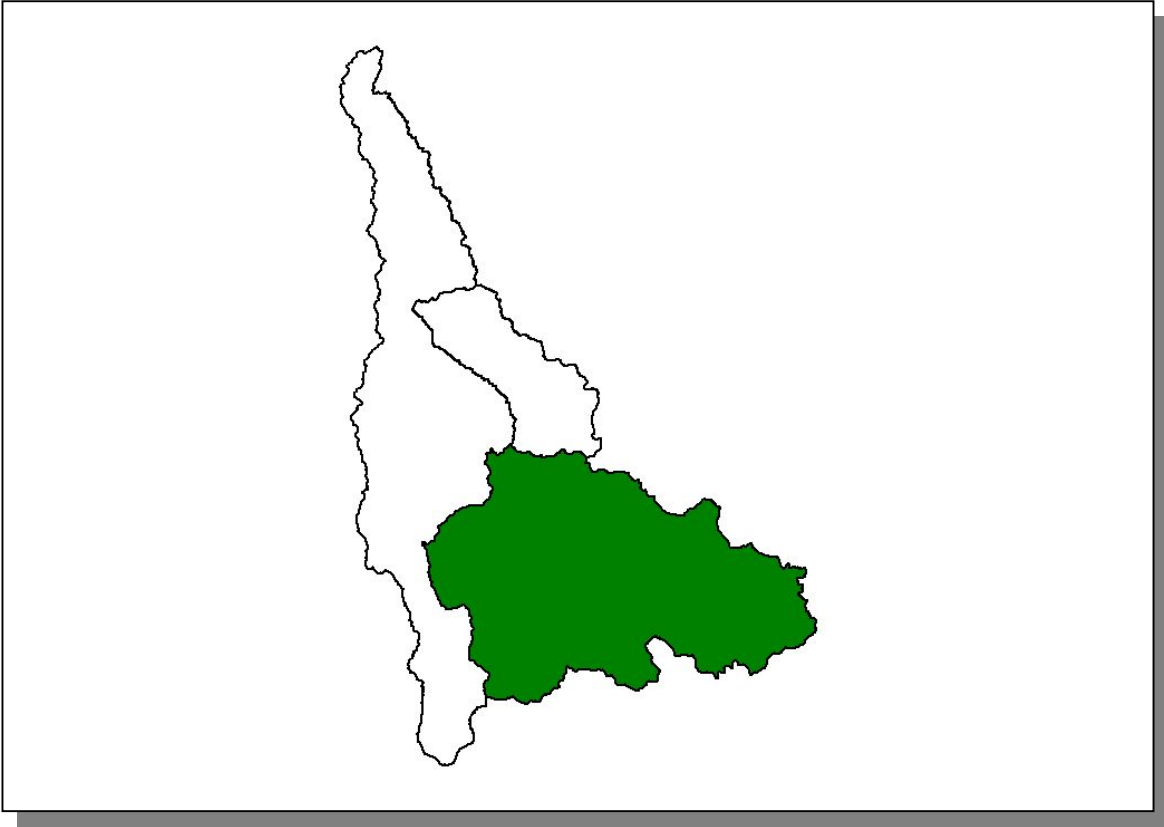


Figure 4-2. Location of Subwatershed 0604000401. All Buffalo River HUC-10 subwatershed boundaries are shown for reference.

4.2.A.i. General Description.

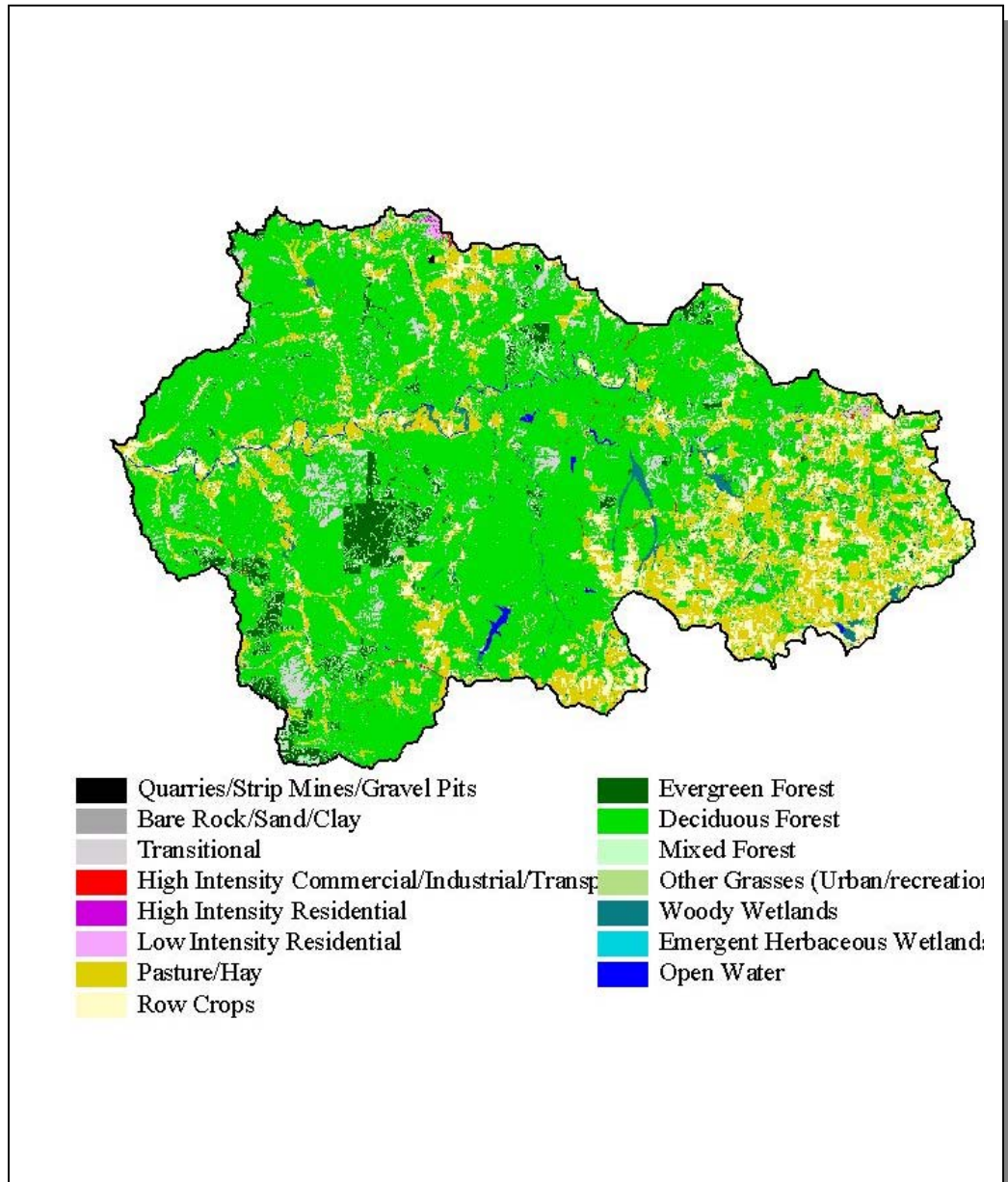


Figure 4-3. Illustration of Land Use Distribution in Subwatershed 0604000401.

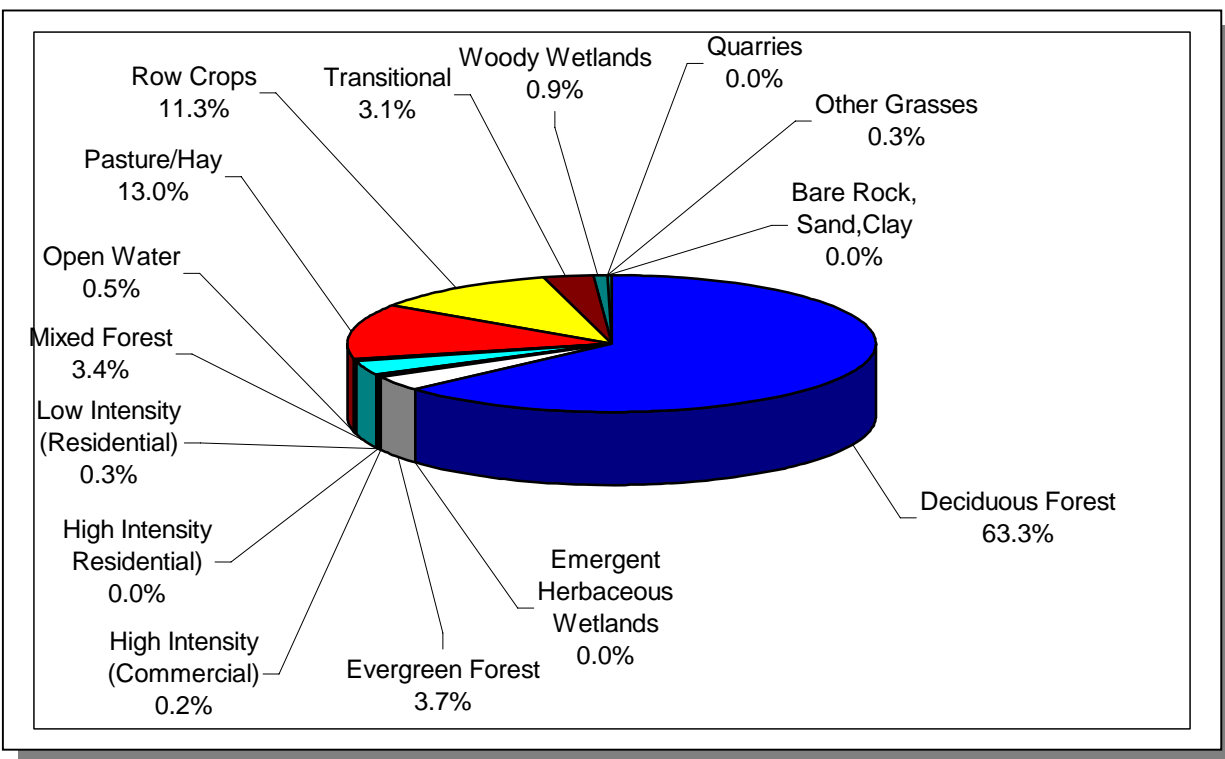


Figure 4-4. Land Use Distribution in Subwatershed 0604000401. More information is provided in Appendix IV.

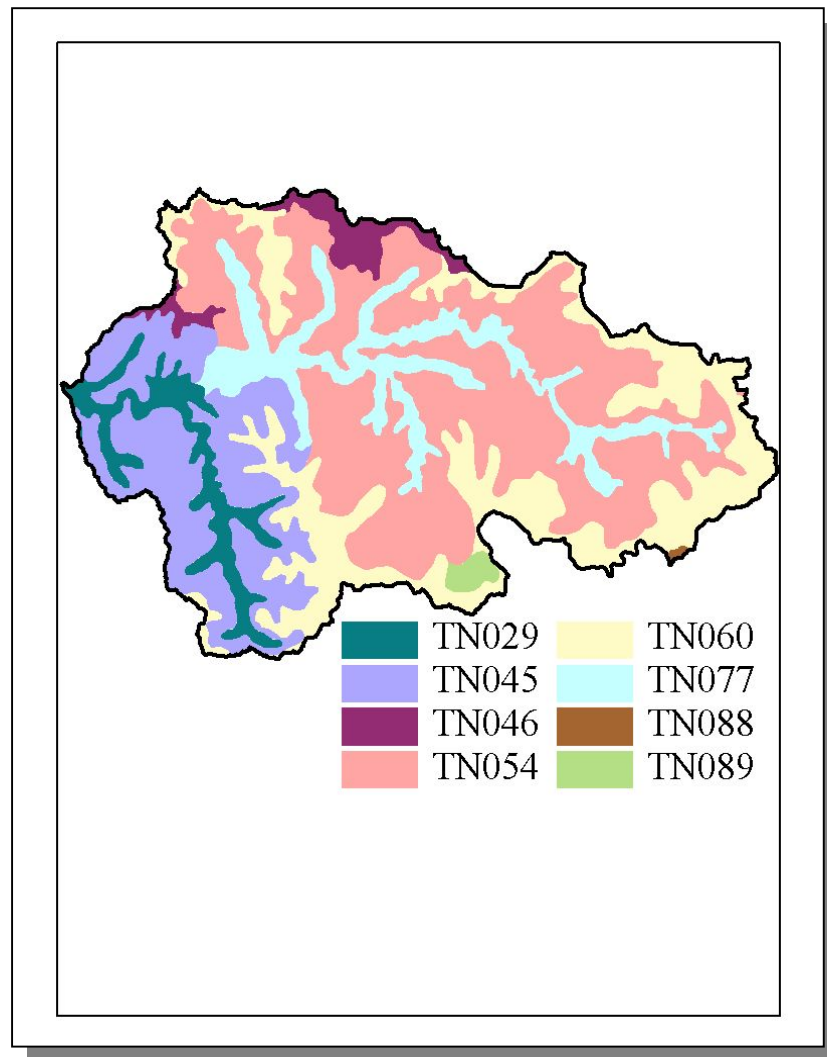


Figure 4-5. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0604000401.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN029	8.00	C	2.96	5.40	Loam	0.33
TN045	0.00	B	1.95	5.45	Loam	0.35
TN046	0.00	B	1.98	5.09	Silty Loam	0.38
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN077	4.00	C	2.16	5.03	Loam	0.34
TN088	1.00	B	1.38	5.43	Silty Loam	0.34
TN089	3.00	B	1.46	5.36	Loam	0.35

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0604000401. More details are provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-1997)
	1990	1997	2000		1990	1997	2000	
Lawrence	35,303	39,095	39,926	23.89	8,433	9,339	9,537	13.1
Lewis	9,247	10,789	11,367	38.67	3,576	4,172	4,396	22.9
Perry	6,612	7,438	7,631	0.03	<5	<5	<5	-
Wayne	13,935	16,498	16,842	14.33	1,997	2,364	2,414	20.9
Totals	65,097	73,820	75,766		14,008	15,878	16,3450	16.7

Table 4-3. Population Estimates in Subwatershed 0604000401.

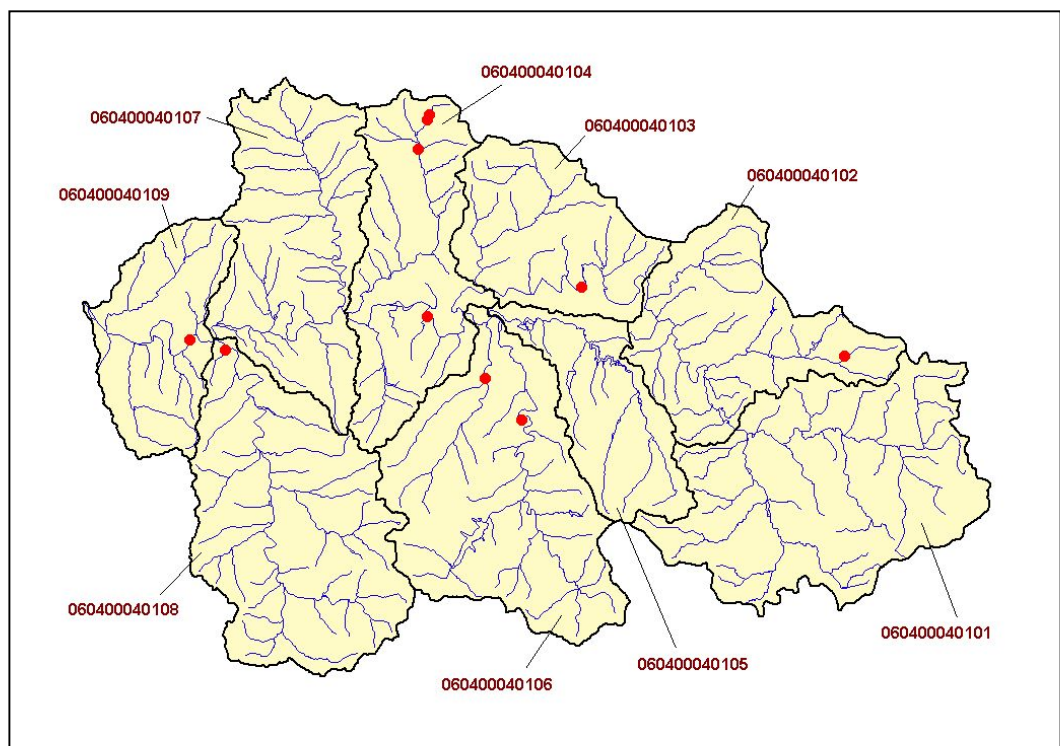


Figure 4-6. Location of STORET Monitoring Sites in Subwatershed 0604000401. Subwatershed 060400040101, 060400040102, 060400040103, 060400040104, 060400040105, 060400040106, 060400040107, 060400040108, and 060400040109 boundaries are shown for reference. More information, including site names and locations, is provided in Appendix IV.

4.2.A.ii Point Source Contributions.

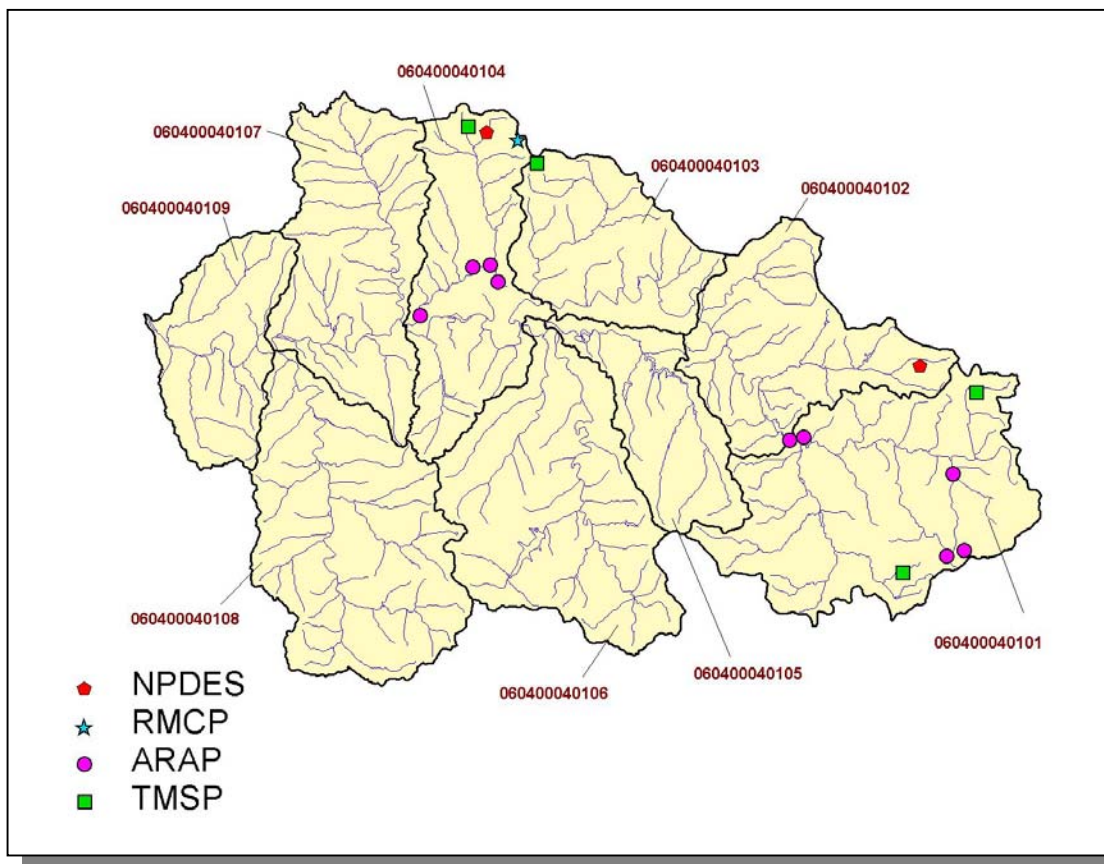


Figure 4-7. Location of Active Point Source Facilities in Subwatershed 0604000401. Subwatershed 060400040101, 060400040102, 060400040103, 060400040104, 060400040105, 060400040106, 060400040107, 060400040108, and 060400040109 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

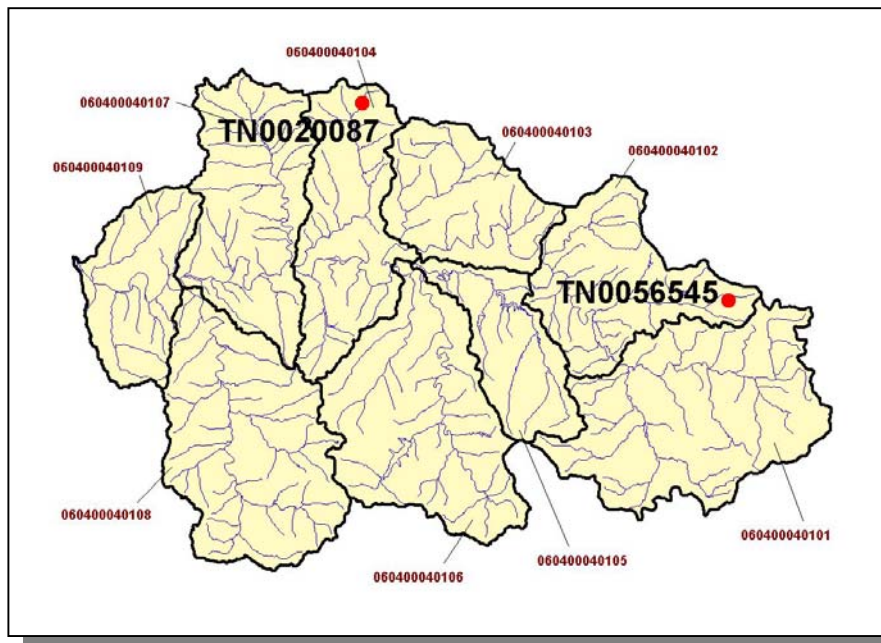


Figure 4-8. Location of NPDES Facilities in Subwatershed 0604000401. Subwatershed 060400040101, 060400040102, 060400040103, 060400040104, 060400040105, 060400040106, 060400040107, 060400040108, and 060400040109 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-9. Location of Ready Mix Concrete Plants in Subwatershed 0604000401. Subwatershed 060400040101, 060400040102, 060400040103, 060400040104, 060400040105, 060400040106, 060400040107, 060400040108, and 060400040109 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

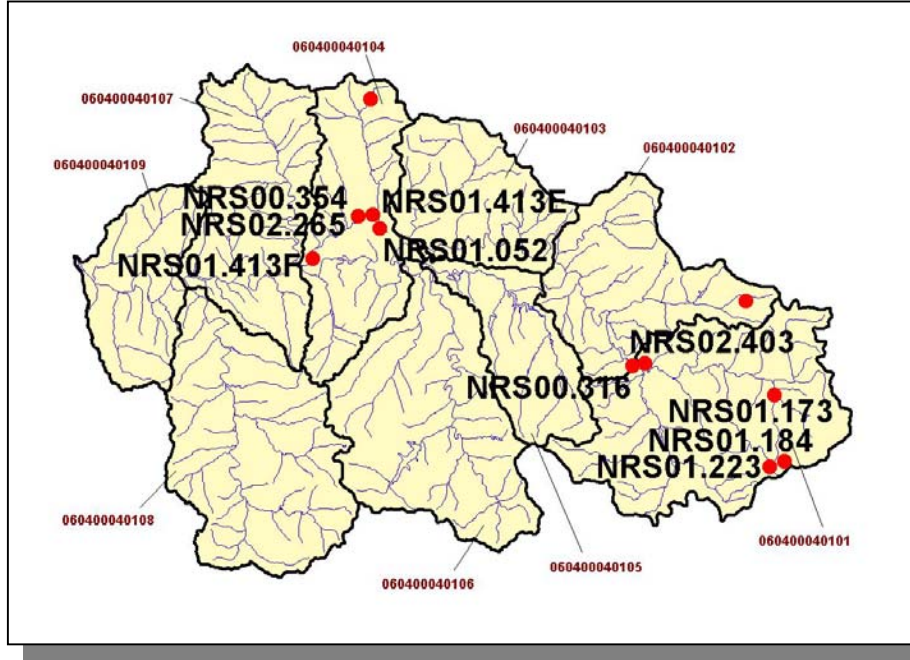


Figure 4-10. Location of ARAP Sites (Individual Permits) in Subwatershed 0604000401. Subwatershed 060400040101, 060400040102, 060400040103, 060400040104, 060400040105, 060400040106, 060400040107, 060400040108, and 060400040109 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

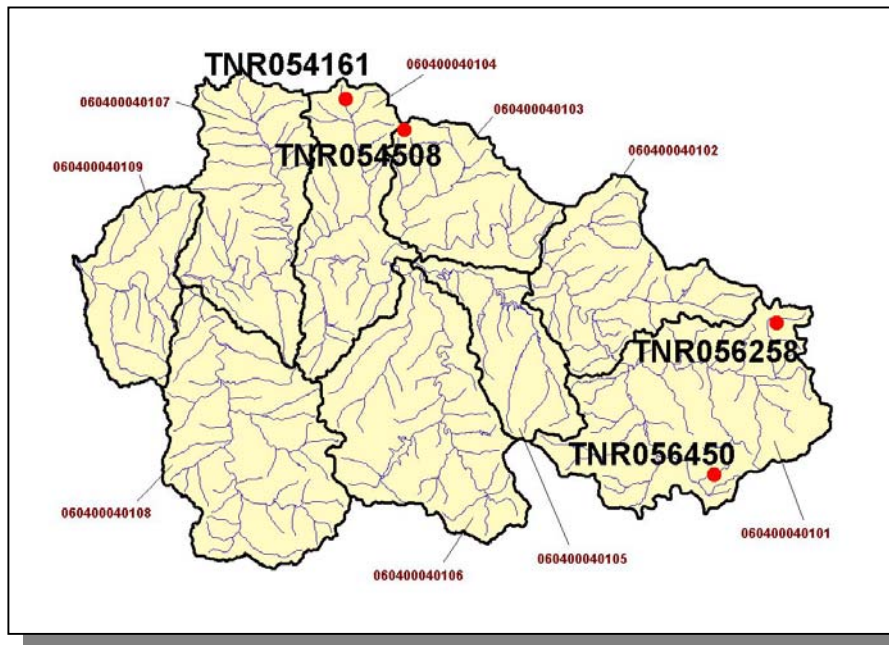


Figure 4-11. Location of TMSP Facilities in Subwatershed 0604000401. Subwatershed 060400040101, 060400040102, 060400040103, 060400040104, 060400040105, 060400040106, 060400040107, 060400040108, and 060400040109 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.ii.a. Dischargers to Water Bodies Listed on the 2002 303(d) List

There is one NPDES facility discharging to water bodies listed on the 2002 303(d) list in Subwatershed 0604000401:

- TN0020087 (Hohenwald High School STP) discharges to Mile 0.1 of a ditch to North Fork Shaw Creek @ RM 1.2



Figure 4-12. Location of NPDES Dischargers to Water Bodies Listed on the 2002 303(d) List in Subwatershed 0604000401. Subwatershed 060400040101, 060400040102, 060400040103, 060400040104, 060400040105, 060400040106, 060400040107, 060400040108, and 060400040109 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0020087	0	0	0	0	1.1

Table 4-4. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0604000401. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT #	WET	CBOD ₅	NH ₃	Hg	TRC	TSS	CN	DO	pH
TN0020087	X	X	X	X	X	X	X	X	X

Table 4-5. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0604000401. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.A.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
10,774	20,299	748	30	8	3,228	100

Table 4-6. Summary of Livestock Count Estimates in Subwatershed 0604000401. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Lawrence	199.8	199.8	6.6	27.1
Lewis	158.0	158.0	4.0	10.2
Perry	223.6	223.6	5.1	22.0
Wayne	372.6	372.6	14.1	41.1
Total	954.0	954.0	29.8	100.4

Table 4-7. Forest Acreage and Annual Removal Rates (1987-1994) in Subwatershed 0604000401.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.65
Grass (Hayland)	0.21
Legumes, Grass (Hayland)	0.64
Grass, Forbs, Legumes (Mixed Pasture)	0.35
Forest Land (Not Grazed)	0.00
Forest Land (Grazed)	0.00
Corn (Row Crops)	6.46
Cotton (Row Crops)	8.07
Sorghum (Row Crops)	4.17
Soybeans (Row Crops)	28.85
Wheat (Close-Grown Cropland)	14.15
All Other Close-Grown Cropland	1.80
Other Cropland not Planted	8.11
Conservation Reserve Program Lands	0.65
Non-Agricultural Land Use	0.00
Other Land in Farms	1.21
Farmsteads and Ranch Headquarters	2.95

Table 4-8. Annual Estimated Total Soil Loss in Subwatershed 0604000401.